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(12) **United States Patent**
Whaley

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(54) **METHOD AND APPARATUS FOR
ACQUIRING REPLACEMENT PRODUCTS
FOR A PRINTING DEVICE OR ACCESSORY**

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(*) **Notice:** Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 32 days.

4,386,725 A * 6/1983 Chambers 227/2
4,523,750 A * 6/1985 Hubler 270/53
4,832,330 A * 5/1989 Picton 271/236
4,905,984 A * 3/1990 Haigh 271/270
5,335,048 A * 8/1994 Takano et al. 355/204
5,434,650 A * 7/1995 Nakahara et al. 355/202
5,441,191 A * 8/1995 Linden 227/120
6,023,593 A * 2/2000 Tomidokoro 399/8
6,233,409 B1 * 5/2001 Haines et al. 399/10
6,328,298 B1 * 12/2001 Suzuki et al. 270/58.08
6,393,339 B1 * 5/2002 Yeadon 700/237

* cited by examiner

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(51) **Int. Cl.⁷** **G06F 17/60**

(52) **U.S. Cl.** **700/244; 227/2; 705/28**

(58) **Field of Search** **705/28; 227/2;
270/58.08; 700/244, 219, 231**

(56) **References Cited**

U.S. PATENT DOCUMENTS

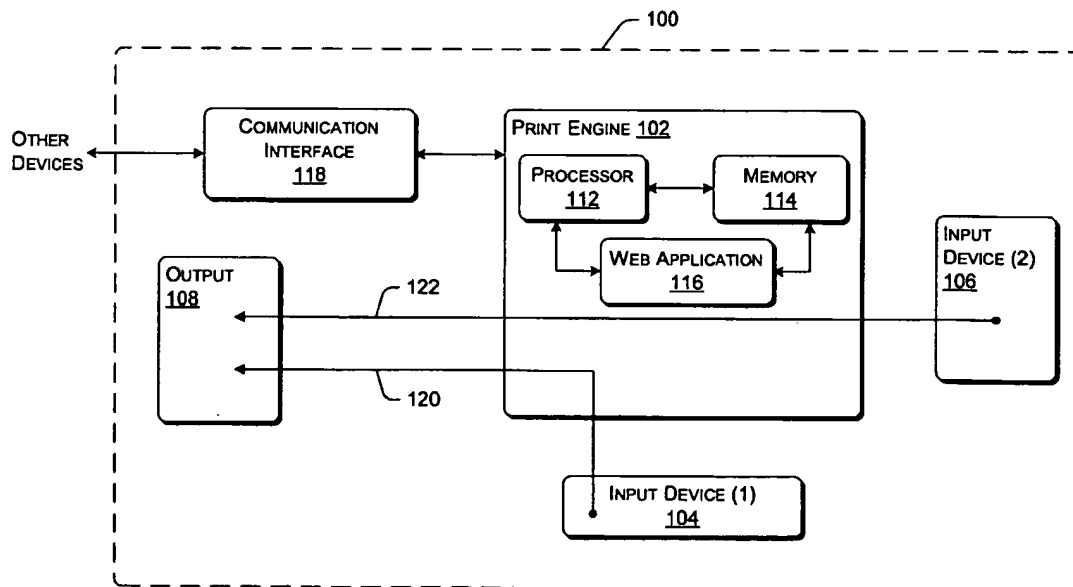
3,685,712 A * 8/1972 Turner et al. 227/3

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(57) **ABSTRACT**

A printing system includes a staple sensor that senses a low staple condition in a stapling device. A low staple message is generated in response to sensing the low staple condition in the stapling device. The printing system identifies a computing device designated to manage the replacement of staples. The low staple message is then communicated to the identified computing device. The computing device contains an application capable of determining whether replacement staples are in stock and capable of ordering more staples if replacement staples are not in stock.

22 Claims, 5 Drawing Sheets



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TITLE: Method and apparatus for acquiring replacement products
for a printing device or accessory

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Detailed Description Text - DETX (18):

A computer 408 is coupled to LAN 406 and a supplier server 416. Computer 408 is used, for example, to manage an inventory of stock items (such as paper, staples, toner cartridges, pens, paper clips, and the like). Computer 408 includes a stock management application 410 and a web browser application 412.

The stock management application 410 helps the user manage the inventory of stock items. The web browser application 412 allows the user of computer 408 to access various web pages (e.g., local web pages available through LAN 406, and Internet web pages available through the Internet 414). Supplier server 416 may be a web server accessible via an internet connection 414, or a server that is accessible via a direct connection 418, such as a dial-up connection. Supplier server 416 is maintained by a supplier of stock items that are managed by stock management application 410. Thus, stock management application 410

may be used to order stock items from a supplier by communicating an order to supplier server 416.